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Subject: Environmental Defense comments on 4-Heptanol, 2,6-Dimethyl (CAS# 108-82-7)

(Submitted via Internet 6/25/04 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, lucierrg@msn.com and Ehunt@adelphia.net)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for 4-Heptanol, 2,6-Dimethyl (CAS# 108-82-7).

The test plan and robust summaries for 4-heptanol, 2,6-dimethyl, also named diisobutyl carbinol (DIBC), were submitted by Dow Chemical Company. This test plan and set of robust summaries, like the previous submission by Dow on 4-nanonone, 2,6,8-trimethyl, are written in a clear and objective manner and contain information consistent with the goals of the HPV program.

The test plan states that DIBC is used primarily as a chemical process solvent in the production of hydrogen peroxide. It also appears to have a number of small-volume uses, including as a mining solvent, a lubricant additive, a coupling solvent for synthetic resins, a chemical manufacturing processing solvent, a dispersing agent in coatings, a fragrant additive, and in the production of perfumes.

The sponsor contends that environmental exposure to DIBC is limited because it is used as an industrial intermediate and solvent. However, several of the small-volume uses listed above would seem to create the opportunity for both environmental and consumer exposures, as well as worker exposure. Are there data on amounts of DIBC in waste streams, products, air emissions and the general environment? Also, has an exposure limit in the workplace been established and are there workplace monitoring data for DIBC? The sponsor considered only accidental releases in the environmental fate modeling. Based on our above concerns, we recommend that other release/emission scenarios be considered in the fugacity modeling.

The test plan and robust summaries indicate that adequate data are available for the required endpoints for physical and chemical data, environmental fate and distribution and ecotoxicity. However, there are no studies on repeat dose, reproductive or developmental toxicity, or on chromosomal aberrations. The sponsor proposes to address these data gaps by conducting a combined repeat dose/reproductive/developmental toxicity study and also a chromosomal aberration study. The test plan indicates that these studies are already in progress. We agree that these studies should be conducted. However, we hope that the sponsor is using the DIBC mixture that is actually marketed as the test substance. This mixture, according to the robust summary, contains 70% DIBC, 30% 4,6-dimethyl-2-heptanol and 3% 2,6-dimethyl-4-heptanone. (We note that this totals 103%.)

Thank you for this opportunity to comment.

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